## DEPARTMENT OF COMMERCE

## **International Trade Administration**

Stanford University et al.; Notice of Decision on Application for Duty-Free Entry of Scientific Instruments

This is a decision pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Pub. L. 89-651, as amended by Pub. L. 106-36; 80 Stat. 897; 15 CFR part 301). On November 1, 2023, the Department of Commerce published a notice in the *Federal Register* requesting public comment on whether instruments of equivalent scientific value, for the purposes for which the instruments identified in the docket(s) below are intended to be used, are being manufactured in the United States. *See Application(s) for Duty-Free Entry of Scientific Instruments*, 88 FR 74977, November 1, 2023. (Notice). We received no public comments.

Docket Number: 23-014. Applicant: Stanford University, Department of Neurosurgery, Ivan Soltesz Laboratory, 1201 Welch Road, Stanford, CA 94305. Instrument: 50 mW Fiber-coupled DPSS 473nm blue lasers (x5). Manufacturer: Shanghai Laser & Optics Century Co., Ltd., China. Intended Use: The instrument will be used to control the activity of neuronal populations in the brain of mice in order to study how altering the activity of specific neurons can lead to changes in mouse behavior and/or the emergence of pathological activity in the brain. Specifically, mice will be genetically induced to express particular optogenetic receptors in neuronal populations in the brain. These lasers will be used to deliver light into the brain via implanted fiberoptic cannula. The receptors, when activated by light, cause an increase in the activity of the neurons in which they are expressed. Lasers will be controlled through an external controller in order to only turn on in response to specific behaviors detected in the mouse. The goal of these studies is to identify specific populations of neurons responsible for

the emergence of various behaviors and brain states. These insights will enable the identification

of neuronal targets for future therapeutic intervention to treat various neurological disorders.

Docket Number: 23-015. Applicant: University of Connecticut, 3107 Horsebarn Hill Road,

Unit 4210, Storrs, CT 06269. Instrument: Swim Tunnel Respirometry Systems and Vertical

Resting Respirometry Systems. Manufacturer: Loligo Systems, Denmark. Intended Use: The

instrument Respirometry refers to the study of an organism's metabolic rates. For this research,

water bath respirometry systems will be used to measure how the metabolic rates of small-bodied

fish and bivalves (oysters, mussels, clams, etc.) are influenced by the different environmental

conditions including temperature change and the presence of chemical stressors such as

contaminants. This scientific equipment order involves two complete swim tunnel respirometry

systems (1500 mL chamber size for small-bodied fish species) and four vertical respirometry

chambers (bivalve species) which allow for the measure of an organism's metabolic rate by

measuring oxygen consumption over time. This research falls under the broader scientific area

of study known as organismal bioenergetics. The order is broken down into component parts

(for example, chambers, pumps, tubing, temperature controls) which together comprise the

complete respirometry systems.

Dated: December 11, 2023.

Gregory W. Campbell,

Director, Subsidies and Economic Analysts,

Enforcement and Compliance.

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